Forest Practices Board

Audit of Forest Planning and Practices

Teal Cedar Products Ltd.
Forest Licence A19201

FPB/ARC/180

September 2015

Table of Contents

Introduction 1

Background 1

Audit Approach and Scope 2

Planning and Practices Examined 3

Audit Results 4

Findings 4

Audit Opinion 6

Appendix 1: Forest Practices Board Compliance Audit Process 7

Introduction

The Forest Practices Board is the public's watchdog for sound forest and range practices in British Columbia. One of the Board's roles is to audit the practices of the forest industry to ensure compliance with the *Forest and Range Practices Act* and the *Wildfire Act*.

As part of its 2015 compliance audit program, the Board randomly selected the Chilliwack Natural Resource District for the location of a full scope compliance audit. Within the district, the Board selected Forest Licence A19201, held by Teal Cedar Products Ltd. (Teal), for audit.

This report explains what the Board audited and the results. Detailed information about the Board's compliance audit process is provided in Appendix 1.

Smoke from a wildfire in the Elaho Valley clouds the sky over Pitt Lake.

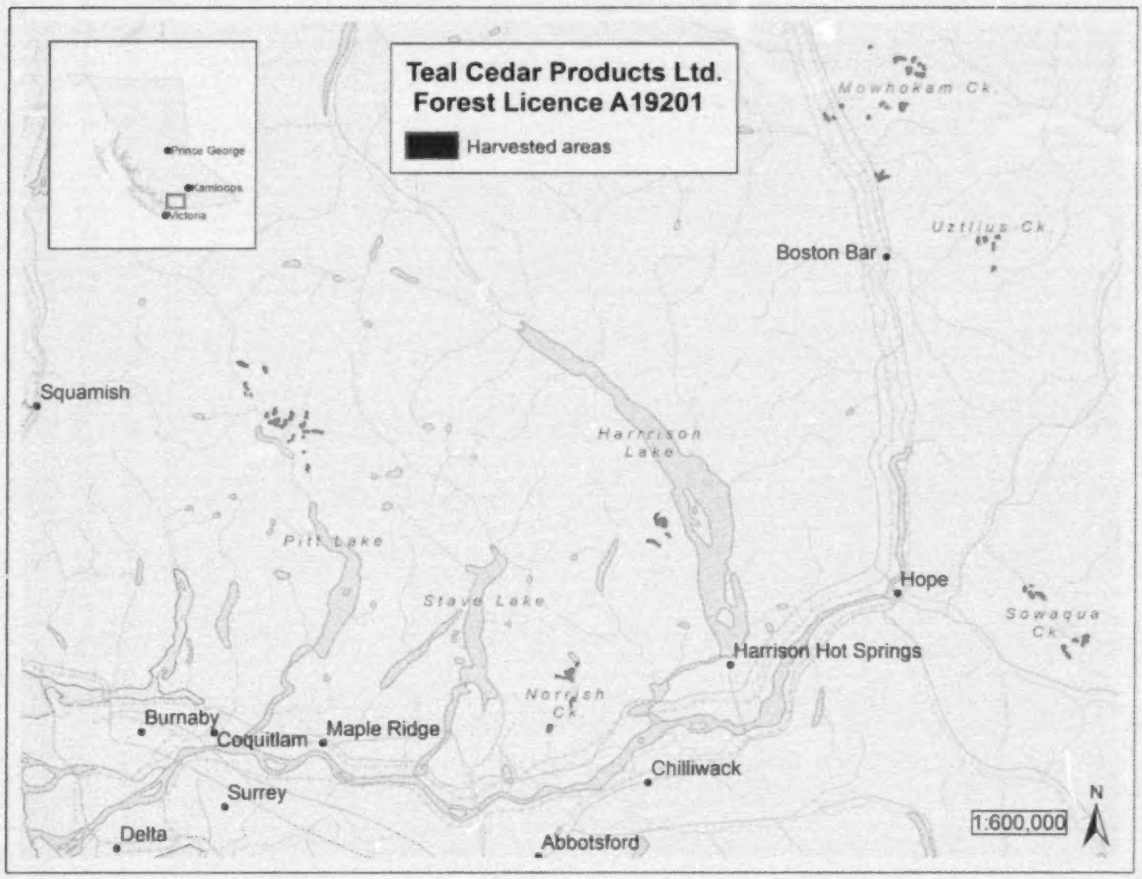
Background

Teal Cedar Products Ltd. is part of the Teal Jones Group—a large, privately held forest products company on British Columbia's coast.

Forest Licence A19201 provides Teal with an allowable annual cut of 314 380 cubic metres of timber from Crown land. Harvesting activity is spread out across the Chilliwack district with operations at Pitt Lake, Norrish Creek, west Harrison Lake, Sowaqua Creek (north of Hope) and Boston Bar. A map of the audit area appears on page 2.

The terrain in Teal's operating area varies from the coastal mountains of the upper Pitt Lake area to gentler, interior-like terrain northeast of Boston Bar. The area features five biogeoclimatic zones: coastal western hemlock, mountain hemlock, interior Douglas-fir, Engelmann spruce-subalpine fir, and alpine tundra.

Map of the Audit Area



Audit Approach and Scope

This was a full scope compliance audit with a one-year timeframe. All activities carried out between July 1, 2014, and July 10, 2015, were subject to audit, including harvesting, roads, silviculture, wildfire protection and associated planning.

Auditors assessed these activities for compliance with the *Forest and Range Practices Act* (FRPA), the *Wildfire Act* (WA), and applicable regulations. The standards and procedures used to carry out this audit are set out in the Board's *Compliance Audit Reference Manual, Version 7.0, September 2012*.

Three forest professionals, one professional engineer, and a chartered professional accountant made up the audit team. The team was in the field with Teal staff from July 6 to 10, 2015. Sites were accessed by truck, boat and helicopter.

Planning and Practices Examined

Operational Planning

Teal planned its activities in a 2006 forest stewardship plan (FSP).[1] The Chilliwack district manager approved Teal's request to extend the plan in 2012, and the plan remains in effect until 2017.

There is no land use plan for the Chilliwack resource district. Instead, there are several orders covering goat and deer winter range, habitat for species at risk, and visual quality. The FSP and stand-level site plans were examined to ensure that they met legislative requirements including relevant orders. Auditors also considered site plans during harvesting, road and silviculture field sampling to ensure that they accurately identified site conditions.

Timber Harvesting

Teal harvested 64 cutblocks, including 8 within the Norrish Creek community watershed. Auditors examined 54 cutblocks.

Road and Bridge Construction, Maintenance and Deactivation

During the audit period, Teal constructed 92 kilometres of road and was responsible for maintaining 1608 kilometres of road permit roads and 269 kilometres of forest service roads. Auditors examined 46 kilometres of new road, 169 kilometres of road permit road and 122 kilometres of forest service road. In-block seasonal road deactivation was considered part of the maintenance population. Teal did not permanently deactivate any roads within the audit period.

Teal was responsible for maintaining 48 bridges and major culverts on forest service roads and 19 bridges on road permit roads, for a total of 67 structures. Auditors examined 33 of these structures. Teal built 6 structures on road permit roads and auditors examined all of them.

Silviculture Obligations and Activities

Teal planted 93 cutblocks and brushed 29 cutblocks during the audit period. Regeneration obligations were due on 47 cutblocks and free-growing obligations were either declared or due on a further 40 cutblocks. There were no site preparation activities as Teal has had good success regenerating cutblocks with planting alone.

Auditors examined 12 planted cutblocks, 9 brushed cutblocks, 6 cutblocks with regeneration obligations due, and 24 cutblocks with free-growing obligations due.

---

[1] A forest stewardship plan (FSP) is a key planning element in the FRPA framework and the only plan subject to public review and comment and government approval. In FSPs, licensees are required to identify results and/or strategies consistent with government objectives for values such as water, wildlife and soils. These results and strategies must be measurable and, once approved, are subject to government enforcement. FSPs identify areas within which road construction and harvesting will occur, but are not required to show the specific locations of future roads and cutblocks. FSPs can have a term of up to five years.

Wildfire Protection

Auditors typically examine fire preparedness requirements such as having adequate fire tools on site and modifying activities when the fire danger is high. Due to the extreme fire danger during audit field work, all forest operations were shut down and auditors could not examine fire preparedness. Auditors examined fire hazard assessment and abatement activities and obligations on the 54 cutblocks in the harvest sample.

Audit Results

Findings

The audit found that Teal's planning and practices complied with FRPA and the WA as of July 2015.

Operational Planning

The FSP contained the legally required information and addressed the legal orders that apply to forest practices in the audit area. The site plans accurately identified resource features and specified how they should be protected. Archaeological impact assessments or preliminary field reviews were completed for blocks in the harvest population and plans were referred to the appropriate First Nations. There were no concerns identified with operational planning.

Harvesting

In general, harvesting was conducted in accordance with the requirements of legislation and site plans. Soil disturbance was well managed and within limits, and natural drainage patterns were maintained. Wildlife tree patches were retained as prescribed.

In the Norrish Creek community watershed, terrain and sedimentation hazard assessments were completed for all blocks, machine-free zones were established and respected around all in-block streams, and exposed soils were seeded promptly.

In summary, harvesting activities were consistent with requirements.

Road Construction, Maintenance and Deactivation

Road Construction

The majority of new roads were built on stable, low risk terrain over moderately to well-drained slopes. In steeper areas, Teal employed qualified terrain specialists and hydrologists. Several new road sections were, in fact, reconstruction and extension of older roads originally built in the mid-1900s. Natural surface and subsurface drainage patterns were maintained and no issues were noted with road construction.

Road Maintenance

Teal's extensive road system is spread throughout the district. Many sections have been inactive for a number of years and are stable, overgrown and impassable. The majority of the terrain in the operating area is considered low to moderate risk, with the exception of the Norrish Creek operating area. Auditors consider the Norrish Creek area to be high risk because it is a

community watershed supplying drinking water to Abbotsford and Mission, and it is critical that forest practices and roads do not negatively impact water quality. Teal, along with other forest licensees, the City of Abbotsford, BC Hydro and the Ministry of Forests and Range are part of a road management group for the community watershed. The group shares information and coordinates activities with the goal of ensuring long term maintenance of water quality.

Teal's roads were stable and natural surface drainage patterns were maintained. No road maintenance issues were identified.

Road Deactivation

Road deactivation was primarily seasonal deactivation of roads within cutblocks, consisting of cross-ditching, backing up culverts and water bars. Auditors consider this type of seasonal deactivation to be a form of road maintenance. No concerns were identified.

Bridge Maintenance

Structures on forest service roads are inspected by government engineers and Teal is responsible for surface maintenance. Teal is also responsible for maintaining 19 of its own bridges. The bridges sampled were well maintained and there were no concerns with bridge maintenance.

Bridge Construction

All required documentation was complete for the six new bridges including plans, profiles, structural drawings and record drawings. A professional signed off on the structures and there were no concerns identified.

In summary, no road or bridge related compliance issues were noted during the audit.

Silviculture Activities and Obligations

Teal's standard practice is to plant multiple species and most cutblocks were planted with at least two species, mainly Douglas-fir and western red cedar. All planted stock in the cutblocks examined met the chief forester's standards for seed use. Planting densities resulted in adequate stocking. There were no concerns with planting or regeneration obligations.

Teal has a relatively large and well-organized brushing program that is successfully protecting crop trees and riparian reserves.

For free-growing obligations, all but four blocks clearly met free-growing criteria. Two of the blocks were burned in a wildfire and the site plans were amended to extend the free-growing date. The remaining two blocks are likely free growing and the next survey will provide confirmation. The juvenile tree performance in sampled blocks was good and there were no concerns with free-growing obligations.

Wildfire Protection

Teal has chosen to use the Defined Hazard Assessment and Abatement Strategy (DHAAS) provided in government's "Guide to Fuel Hazard Assessment and Abatement in British Columbia[2]." Teal uses the government's fire risk map to determine whether a cutblock is in a low, moderate, high or extreme risk area. The DHAAS provides a chart where one can determine whether or not to abate by considering fire risk, slope, aspect, dominant woody species and number of piles per hectare. Teal assesses fire hazard at the completion of harvesting as part of the final harvest inspection.

For hazard abatement, Teal piles and burns slash on completed cutblocks.

There were no issues with hazard assessment or abatement.

Audit Opinion

In my opinion, the operational planning, timber harvesting, road construction and maintenance, silviculture, and fire protection activities carried out by Teal Cedar Products Ltd. on Forest Licence A19201, between July 1, 2014, and July 10, 2015, complied in all significant respects with the requirements of the *Forest and Range Practices Act*, the *Wildfire Act* and related regulations, as of July 2015. No opinion is expressed with respect to road deactivation.

In reference to compliance, the term "in all significant respects" recognizes that there may be minor instances of non-compliance that either may not be detected by the audit, or that are detected but not considered worthy of inclusion in the audit report.

The *Audit Approach and Scope* and the *Planning and Practices Examined* sections of this report describe the basis of the audit work performed in reaching the above conclusion. The audit was conducted in accordance with the auditing standards of the Forest Practices Board. Such an audit includes examining sufficient forest planning and practices to support an overall evaluation of compliance with FRPA, and WA.

C R Mosher

Christopher R. Mosher CPA, CA, EP(CEA)
Director, Audits

Victoria, British Columbia
September 11, 2015

[2] The guide to fuel hazard assessment and abatement in BC is available at: http://bcwildfire.ca/Industry_Stakeholders/industry/

Appendix 1:
Forest Practices Board Compliance Audit Process

Background

The Forest Practices Board conducts audits of government and agreement-holders under the *Forest and Range Practices Act* (FRPA), section 122, and the *Wildfire Act* (WA). Compliance audits examine forest or range planning and practices to determine whether or not they meet FRPA and / or WA requirements.

Selection of Auditees

The Board conducts about 8 or 9 compliance audits annually. Most of these are audits of agreement holders. The Board also audits the government's BC Timber Sales Program (BCTS). This section describes the process for selecting agreement holders to audit.

To begin with, auditors randomly select an area of the Province, such as a district. Then the auditors review the forest resources, geographic features, operating conditions and other factors in the area selected. These are considered in conjunction with Board strategic priorities (updated annually), and the type of audit is determined. At this stage, we choose the auditee(s) that best suits the selected risk and priorities. The audit selections are not based on past performance.

For example, in 2010, the Board randomly selected the Mackenzie district as a location for an audit. After assessing the activities within that area, we discovered that a large licensee had recently closed operations due to financial problems. As the Board has expressed concern in the past about financially strapped companies failing to meet outstanding obligations, such as reforestation and road maintenance, and we knew that some of the licence area is very remote, the new licence holder was selected for audit.

For BCTS audits, a district within one of the 12 business areas within the province is selected randomly for audit.

Audit Standards

Audits by the Board are conducted in accordance with the auditing standards developed by the Board. These standards are consistent with Canadian generally accepted auditing standards. The standards for compliance audits are described in the Board's *Compliance Audit Reference Manual*.

Audit Process

Conducting the Audit

Once the Board randomly selects an area or district and determines the scope of audit to be conducted and the licensee(s) to be audited, all activities carried out during the period subject to audit are identified (such as harvesting or replanting, and road construction or deactivation activities). Items that make up each forest activity are referred to as a population. For example, all sites harvested form

the timber harvesting population and all road sections constructed form the road construction population.

A separate sample is then selected for each population (e.g., the cutblocks selected for auditing timber harvesting). Within each population, more audit effort (i.e., more audit sampling) is allocated to areas where the risk of non-compliance is greater.

Audit fieldwork includes assessments of features using helicopters and ground procedures, such as measuring specific features like riparian reserve zone width. The audit teams generally spend one week in the field.

Evaluating the Results

The Board recognizes that compliance with the many requirements of FRPA and WA, is more a matter of degree than absolute adherence. Determining compliance, and assessing the significance of non-compliance, requires the exercise of professional judgment within the direction provided by the Board.

The audit team, composed of professionals and technical experts, first determines whether forest practices comply with legislated requirements. For those practices considered to not be in compliance, the audit team then evaluates the significance of the non-compliance, based on a number of criteria, including the magnitude of the event, the frequency of its occurrence and the severity of the consequences.

Auditors categorize their findings into the following levels of compliance:

Compliance – where the auditor finds that practices meet FRPA and WA requirements.

Not significant non-compliance – where the auditor, upon reaching a non-compliance conclusion, determines that one or more non-compliance event(s) is not significant and not generally worthy of reporting. However, in certain circumstances, events that are considered not significant non-compliance may be reported as an area requiring improvement.

Significant non-compliance – where the auditor determines a non-compliance event(s) or condition(s) is or has the potential to be significant, and is considered worthy of reporting.

Unsound Practice – where the auditor identifies a significant practice that, although they are found to be in compliance with FRPA or WA, are considered to not be sound management.

Significant breach – where the auditor finds that significant harm has occurred, or is beginning to occur, to persons or the environment as a result of one or many non-compliance events.

If it is determined that a significant breach has occurred, the auditor is required by the *Forest Practices Board Regulation* to immediately advise the Board, the party being audited, and the Minister of Forests, Lands and Natural Resource Operations.

Reporting

Based on the above evaluation, the auditor then prepares a draft audit report. The party being audited is given a draft of the report for review and comment before it is submitted to the Board.

Once the auditor submits the draft report, the Board reviews it and determines if the audit findings may adversely affect any party or person. If so, the party or person must be given an opportunity to make representations before the Board decides the matter and issues a final report. The representations allow parties that may potentially be adversely affected to present their views to the Board.

The Board then reviews the draft report from the auditor and the representations from parties that may potentially be adversely affected before preparing its final report. Once the representations have been completed, the report is finalized and released: first to the auditee and then to the public and government.

Forest
Practices
Board

PO Box 9905 Stn Prov Govt
Victoria, BC V8X 9R1 Canada
Tel. 250.213.4700 | Fax 250.213.4725 | Toll Free 1.800.994.5899
For more information on the Board, please visit our website at: www.bcfpb.ca